

AMENDMENTS

Amendments to the Claims:

Please replace the claims with the following listing of claims.

1. (Currently amended) A document automatic classification system, comprising:

list generation means for generating a word list for each ~~category~~ of at least two categories by extracting words from a learning document set; ~~and~~

unnecessary word determination means for relatively determining an unnecessary word for ~~each a~~ category on the basis of a frequency of appearance of a given word in each other category by using the list generated by said list generation means; and

means for generating a document classification catalog by eliminating words determined to be unnecessary words from each of the word lists.

2. (Currently amended) The system according to Claim 1, wherein said list generation means generates a list indicating a frequency of appearance of a given word for each category ~~from said learning document set in the means for storing storage means.~~

3. (Currently amended) The system according to Claim 1, wherein said unnecessary word determination means extracts a word belonging to a given category and determines it to be an unnecessary word if in response to the word appearing ~~appears~~ more frequently in another category than is allowed by a given standard ~~in another category.~~

4. (Currently amended) The system according to Claim ~~3~~4, wherein ~~said unnecessary word determination means determines the word extracted from said given category to be an unnecessary word if it appears more frequently in another category than the given standard is determined according to a predetermined threshold and the number of documents belonging to said another category.~~

5. (Currently amended) The system according to Claim 1, further comprising:

~~classification catalog storage means for storing a list for each category from which~~

~~unnecessary words were eliminated based on the determination with said unnecessary word determination means; and~~

document classification means for performing classification processing for classification target documents by using said document classification catalog stored in the classification catalog storage means.

6. (Currently amended) A document automatic classification system, comprising:

a classified document set storage device for storing documents classified according to at least two categories~~category~~;

a category table generation unit for generating a table, the table comprising:

word lists corresponding to each of the at least two categories wherein the word lists are generated by extracting words from a learning document set ~~the broken down by category including information on a frequency of appearance of a word contained in a document acquired from said classified document set storage device; and~~

frequencies comprising the frequency of appearances of each extracted word within the learning document set;

an unnecessary word elimination unit for eliminating an unnecessary word from a for each category concerned from in the table on the basis of a-the frequency of appearance in each other category of a given word ~~acquired from the table broken down by category generated by said category table generation unit; and~~

a classification catalog storage device for storing the table from which the unnecessary word was eliminated by said unnecessary word elimination unit.

7. (Original) The system according to Claim 6, further comprising:

a classification target document storage device for storing classification target documents to be classified; and

a document classification processing unit for performing classification processing for the classification target documents stored in said classification target document storage device by using said table stored in said classification catalog storage device.

8. (Currently amended) The system according to Claim 6, wherein said unnecessary word elimination unit extracts a word belonging to a given category and eliminates the word as an unnecessary word from said table in response to if the word appearing appears more frequently than a given standard in another category than is allowed by a given standard.

9. (Currently amended) The system according to Claim 6, wherein said table ~~broken down by category generated by said category table generation unit~~ contains information on eachthe word, a frequency of appearance of ~~each~~the word, and a part of speech of ~~each~~the word.

10. (Currently amended) An unnecessary word determination method in a document automatic classification system, comprising the steps of:

~~extracting a word contained in a document for each category from a storage device storing a learning document set;~~

generating a word list for each of at least two categories by extracting words from a learning document set, the word list containing information on a frequency of appearance of eachthe extracted word withinfor each category;

~~recognizing a frequency of appearance in other categories of a given word belonging to a given category by using the generated list; and~~

determining an unnecessary word for each a category on the basis of the relative~~recognized~~ frequency of appearance of a given word within each other category; and
eliminating words determined to be unnecessary words from each of the word lists.

11. (Currently amended) The method according to Claim 10, wherein, in said step of determining the unnecessary word, the unnecessary word is determined according to whether one word selected from the given category appears in said other categories more frequently than is allowed by a given standard.

12. (Currently amended) The method according to Claim 11, wherein said given standard is a value obtained from ~~the number of documents in said other categories~~ and a predetermined given threshold.

13. (Original) The method according to Claim 11, wherein said given standard is determined according to said frequency of the word in said other categories and a total frequency of all words in said other categories.

14. (Currently amended) An unnecessary word determination method in a document automatic classification system, comprising the steps of:

acquiring information on words ~~for each category~~ from a document set, classifying the words classified according to category, and storing the words stored in a storage device;

recognizing a frequency of appearance in ~~each other category~~ ~~other categories~~ of a word belonging to a given category on the basis of the acquired information; ~~and~~

determining whether the word is unnecessary for identifying the given category on the basis of the recognized frequency; and

generating a document classification catalog by eliminating words determined to be unnecessary words.

15. (Currently amended) The method according to Claim 14, further comprising ~~the steps of:~~

~~generating a document classification catalog by eliminating words determined to be an unnecessary word; and~~

storing said classification catalog into the storage device.

16. (Currently amended) The method according to Claim 15, further comprising the step of performing classification processing for classification target documents by using the classification catalog stored in said storage device.